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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|---------------------|------------------|
| 09/829,330 | 04/09/2001 | Burkhard Becker | GR 00 P 1696 | 7120 |
| 24131 | 7590 | 12/23/2004 | EXAMINER | |
| LERNER AND GREENBERG, PA | | | PEYTON, TAMMARA R | |
| P O BOX 2480 | | | ART UNIT | PAPER NUMBER |
| HOLLYWOOD, FL 33022-2480 | | | 2182 | |

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Offic Action Summary | Application No. | Applicant(s) |
|-----------------------------|------------------------|---------------------|
| | 09/829,330 | BECKER ET AL. |
| Examiner | Art Unit | |
| Tammara R Peyton | 2182 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 4/9/01.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-5 and 7-11 is/are rejected.
7) Claim(s) 6 is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/24/01.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. .
5) Notice of Informal Patent Application (PTO-152)
6) Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goff et al., (US 5,845,130).

As per claims 1, 10, and 11, Goff teaches a device for a bidirectional transfer of data, comprising:

a first processor (200/400);

a second processor (208/408);

an input/output memory (memory, 410+Registers, 202) connected to said second processor and said first processor, said input/output memory having a plurality of memory blocks for receiving output or input data from said first processor or said second processor;

an input/output control information memory (Traffic Controller, 204/412) connected to said input/output memory and storing an item of binary control information for each of said memory blocks of said input memory; (col. 3, lines 66- col. 5, lines 14)

and at least one direct memory access (DMA) channel (Traffic Controller, 204/412) for writing the output data from said first processor to said input/output memory and for reading the input data for said first processor from said input/output memory, said DMA channel connected to said first processor, said input memory and said output memory, access to said input/output memory being regulated such that a write access of said first processor and a read access of said second processor to said input/output memory is permitted on a basis of the item of control information stored in said input/output control information memory, and the write access of said second processor and the read access of said first processor to said input/output memory is permitted on a basis of the item of control information stored in said input/output control information memory.

Goff teaches a shared memory system with a first processor and a second processor wherein a traffic controller holds identifying information for each processor. The traffic controller is checked on behalf of the first processor to determine if an identifier corresponding to the second processor is present in the traffic controller. This determines whether the second processor is currently in control of the shared memory. If the second processor is in control of the shared memory then write or read access to the shared memory is denied to the first processor. Further, if identifiers corresponding to the first processor are present in the traffic controller then write or read access is denied to the second processor. (Abstract, col. 4, lines 54-col. 7, lines 1-10) However, Goff is silent in respect to a DMA channel, nonetheless, one of ordinary skill would

readily recognize that Goff teaches a method of direct access of specific memory blocks. Goff does not need to expressly use the term polling in the disclosure since one skilled in the art is presumed to know something about the art apart from what the references literally disclose. (see *In re Jacoby*, 309 F.2d 513, 135 USPQ 317 (CCPA 1962)).

As per claims 2 and 3, Goff teaches wherein a write access operation of said first processor to a memory block of said input/output memory is permitted only if the item of binary control information for the memory block is in a first state and wherein a read access operation of said second processor to the memory block of said input/output memory is permitted only if the item of binary control information for the memory block is in a second state.

As per claims 4 and 5, Goff teaches wherein a read access operation of said first processor to a memory block of said input/output memory is permitted only if the item of binary control information for the memory block is in a first state and wherein a write access operation of said second processor to a memory block of said input/output memory is permitted only if the item of binary control information for the memory block is in a second state.

As per claim 7, the uses of cyclic memories are well known in the art thereby making use of this type of memory obvious to one of ordinary skill.

As per claims 8 and 9, Goff does not expressly teach wherein said first processor is a digital signal processor, and said second processor hardware logic circuit, however, it would have been obvious to one of ordinary skill that Goff would have been motivated to implement a host of other processors because doing so would expand the flexibility of Goff's system.

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (571) 272-4157. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718. Any inquiry of a general nature of relating to the status of this application

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should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

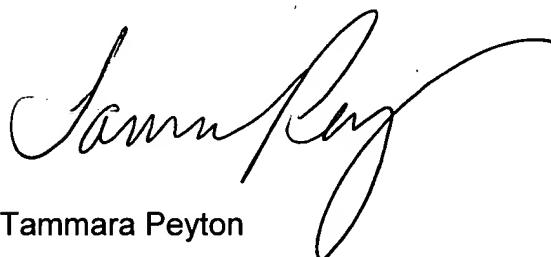
(703) 872-9306

Hand-delivered responses should be brought to:

USTPO, 2011 South Clark Place, Customer Window

Crystal Plaza Two, Lobby Room 1B03, Arlington, VA, 22202

Crystal Park II, 2121.

A handwritten signature in black ink, appearing to read "Tammara Peyton".

Tammara Peyton

December 10, 2004